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ABSTRACT

A filter system for temporary placement of a filter in an artery or vein.

The filter system includes a guidewire that is first positioned across a lesion within a vessel. The guidewire may include a distal stop. A slideable filter is then advanced along the guidewire using an advancing mechanism, typically an elongate member slideable over the guidewire and contacting the filter. A capture sheath may be disposed about the filter during advancement. Once the filter is positioned downstream of the lesion, the capture sheath is withdrawn, allowing the filter to expand. Further distal advancement of the filter is prohibited by the stop. After expansion of the filter, the capture sheath and the advancing mechanism are withdrawn from the region of interest, and removed from the patient's vessel. The filter may then be retrieved using a capture sheath or exchanged for a second filter after removing the first filter.

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